



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	. <u> </u> i	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,585	02/08/2002		Marek Kwiatkowski	11989-008001	2835
26191	7590	12/15/2004		EXAMINER	
		SON P.C.	LU, FRANK WEI MIN		
3300 DAIN RAUSCHER PLAZA 60 SOUTH SIXTH STREET				ART UNIT	PAPER NUMBER
MINNEAP	OLIS, M	N 55402	1634		
				DATE MAILED: 12/15/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/071,585	KWIATKOWSKI, MAREK					
Office Action Summary	Examiner	Art Unit					
	Frank W Lu	1634					
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the o	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of tirne may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing - earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tiry within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a BANDONE	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).					
Status	•						
1)⊠ Responsive to communication(s) filed on 10 S	eptember 2004.						
	action is non-final.						
	, — · · · · · · · · · · · · · · · · · ·						
Disposition of Claims							
Claim(s) 1-35 is/are pending in the application. 4a) Of the above claim(s) 4,5,10-13,18,20-23,29,32 and 33 is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) 26-28,30,31 and 34 is/are rejected. Claim(s) 1-3,6-9,14-17,19,24,25 and 35 is/are objected to. Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) ☐ The specification is objected to by the Examine	er.						
10)⊠ The drawing(s) filed on <u>08 February 2002</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.							
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex		· ·					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stage					
A44-2-h							
Attachment(s) 1) Notice of References Cited (PTO-892)	A) Interview Com	(DTO 442)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) ∐ Interview Summary Paper No(s)/Mail Da	ate					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P 6) Other:	Patent Application (PTO-152)					

Application/Control Number: 10/071,585

Art Unit: 1634

DETAILED ACTION

Page 2

Election/Restrictions

1. Applicant's election without traverse of species of interaction with separation medium via a non-covalent interaction (claims 3 and 6), species wherein separation unit is alkoxypixyl (claims 8 and 9), species wherein separation medium is a reverse phase separation medium (claims 17 and 19), species wherein cleaving step is facilitated using TBAF (claim 28), and species wherein a cleavable unit of the first or second separation tag comprises a siloxyl or disiloxy moiety (claim 16) in the reply filed on September 10, 2004 is acknowledged. Therefore, claims 1-3, 6-9, 14-17, 19, 24-28, 30, 31, 34, and 35 will be examined. The following rejections are based on amendments filed on April 5, 2004.

Claim Objections

2. Claims 1 and 27 are objected to because of the following informalities: "said second separation tags" in line 6 of step a) of the claims should be "said second separation tags".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 26-28, 31, and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Application/Control Number: 10/071,585

Art Unit: 1634

5. Claim 26 recites the limitation "said non-cleaved separation tag" in the claim There is insufficient antecedent basis for this limitation in the claim because there is no phrase "non-cleaved separation tag" in claim 1. Please clarify.

Page 3

- 6. Claim 27 recites the limitation "said second separation function" in the claim There is insufficient antecedent basis for this limitation in the claim because there is no phrase "second separation function" in steps a) to d) of claim 27. Please clarify
- 7. Claim 31 is rejected as vague and indefinite because it is unclear how said separation medium (a separation medium recited in claim 30) can comprise a first separation medium and a second separation medium. Please clarify
- 8. Claim 34 recites the limitation "the other separation tag" in the claim There is insufficient antecedent basis for this limitation in the claim because there is no phrase "other separation tag" in claim 1. Please clarify.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 10. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by Kwiatkowski *et al.*, (Nucleic Acids Research, 24, 4632-4638, 1996).

Regarding claim 30, since Kwiatkowski et al., teach an oligonucleotide 16 (see Figure 1),

Kwiatkowski *et al.*, disclose a plurality of oligonucleotides (ie., multiple oligonucleotide 16), each said oligonucleotide comprising a first separation tag (ie., CPG-based support) attached to a first end of said oligonucleotide (5' of oligonucleotide 16) and a second separation tag (ie., disiloxyl group) attached to a second end of said oligonucleotide (3' of oligonucleotide 16), wherein cleavage of said second separation tags yields an oligonucleotide having a 3' hydroxyl moiety (after cleavage of disiloxyl group) as recited in a) the claim. Since Kwiatkowski *et al.*, teach that the oligonucleotide 16 is bound to a reversed-phase Pep RPC column (see 4634, right column, fourth paragraph) for purification, Kwiatkowski *et al.*, disclose a separation medium (ie., resin in the reversed-phase Pep RPC column), said plurality of oligonucleotides (ie., multiple oligonucleotide 16) adhering to said separation medium as recited in b) of the claim.

Therefore, Kwiatkowski et al., teach all limitations recited in claim 30.

Response to Arguments

In page 8, third paragraph of applicant's remarks, applicant argues that Kwiatkowski *et al.*, do not teach claim 30.

The arguments have been carefully considered but they are not persuasive toward the withdrawal of the rejection on claim 30 because Kwiatkowski *et al.*, teach all limitations recited in claim 30 (see above rejection).

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1634

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

- 12. Claims 1-3, 6-9, 14-17, 19, 24-28, 34, and 35 appear to be allowable if above objections and the rejections under 35 U. S. C. 112 can be overcome.
- Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CAR § 1.6(d)). The CM Fax Center number is either (703) 872-9306.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Lu, Ph.D., whose telephone number is 571-272-0746. The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion, can be reached on (703) 308-1119.

Application/Control Number: 10/071,585

Art Unit: 1634

Page 6

Any inquiry of a general nature or relating to the status of this application should be directed to the Chemical Matrix receptionist whose telephone number is (703) 308-0196.

Frank Lu PSA December 10, 2004

KENNETH R. HORLICK, PH.D PRIMARY EXAMINER

12/13/04